UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,080	08/04/2003	Thomas M. Tirpak	33692.02.2745	5254

23418 7590 07/12/2010
VEDDER PRICE P.C.
222 N. LASALLE STREET
CHICAGO, IL 60601

EXAMINER
MORRISON, JAY A

ART UNIT	PAPER NUMBER
2168	

MAIL DATE	DELIVERY MODE
07/12/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2010*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5-12,14-22,25 and 27-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 5-12, 14-22, 25, and 27-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Remarks

1.   Claims 1, 5-12, 14-22, 25, and 27-30 are pending.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.,* 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating
        obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

3.   Claims 1, 5-12, 14-22, 25 and 27-30 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Liu et al. ('Liu' hereinafter) ("XWRAP: an XML-enabled wrapper

construction system for Webinformation sources", Proceedings of the 16th International

Conference on Data Engineering, Publication Date: 2000, pgs 611-621) in view of Keith

(Patent Number 6,629,097).

        As per claim 1, Liu teaches

        A data management system comprising: (see abstract, where XWRAP inherently

needs to work on a system for managing data)

        a processing device; (users use mouse to select means there is a processing

device, abstract, second paragraph)

        memory containing executable instructions that cause the processing device to

perform as a knowledge container creator module operative to create at least a first

data descriptor item and at least a second data descriptor item (encoding extraction

rules into XML template, pages 3-4, section 2.1, "Code Generation" paragraph) based

upon a data item (XML template file, page 14, section 4.3, third paragraph), and to link

the data item to at the least a first data descriptor item, and to link the data item to the at

least a second data descriptor item (XWRAP creates parse tree where leafs act as

links, page 12, section 4.2, "Example 3");

and wherein the first data descriptor item is in the form of a context descriptor

(XML templates contain field for specified source document fields, page 15, section 4.3,

fourth paragraph), and wherein the second data descriptor item is in the form of at least

a data access instructions descriptor that provides instructions on how to access the

new data in the raw data file (XML templates containing processing instructions, page

14, section 4.3, fourth paragraph).

Liu does not explicitly indicate "raw", "where in the raw data item is in a plurality

of different formats" and "that is in a plurality of different formats that include at least two

of: formatted data, unformatted data and data links".

However, Keith discloses "raw" (raw data processing, column 25, lines 53-54),

"where in the raw data item is in a plurality of different formats that include at least two

of: formatted data, unformatted data and data links" (raw data processing, column 25,

lines 53-54; myriad of sources, column 18, lines 8-20; any text source can be used as

input, column 18, lines 12-15) and "that is in a plurality of different formats" (any text

source can be used as input, column 18, lines 12-15).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine Liu and Keith because using the steps of "raw", "where

in the raw data item is in a plurality of different formats that include at least two of:

formatted data, unformatted data and data links" and "that is in a plurality of different

formats" would have given those skilled in the art the tools to improve the invention by

allowing the indexing and searching of data sources which are not in a database format.

This gives the user the advantage of the ability to quickly utilize these data sources

which are too large in number to search otherwise.

As per claim 5, <u>Keith</u> teaches

A data management system comprising: (see abstract, where XWRAP inherently

needs to work on a system for managing data)

a processing device; (users use mouse to select means there is a processing

device, abstract, second paragraph)

and memory containing executable instructions that cause the processing device

to perform as a knowledge container creator module, to at least a first data descriptor

item, in XML format (XML template file, page 14, section 4.3, third paragraph), wherein

the first data descriptor item is in the form of a context descriptor containing descriptive

information about the data item (XML templates contain field for specified source

document fields, page 15, section 4.3, fourth paragraph), and wherein the knowledge

container creator module is operative to link the data item to at least a second data

descriptor item, in XML format (XWRAP creates parse tree where leafs act as links,

page 12, section 4.2, "Example 3"), wherein the second data descriptor item is in the

form of at least a data access instructions descriptor, providing instructions on how to

access the data in the data item; (XML templates containing processing instructions,

page 15, section 4.3, fourth paragraph)

a knowledge container searcher module operative to retrieve the data item by
searching at least one of: the first and second data descriptor items; (XML templates
containing field identifiers and instructions for processing source, page 14, section 4.3,
fourth paragraph)

a base knowledge container update module that is operative to format the data
item into a specific XML knowledge container format. (XML output which can be parsed,
page 2, section 1, fourth paragraph)

Liu does not explicitly indicate "raw", "operative to link a raw data item that is in a
plurality of different formats that include at least two of: formatted data, unformatted
data and data links" and "that is in a plurality of different formats".

However, Keith discloses "raw" (raw data processing, column 25, lines 53-54),
"operative to link a raw data item that is in a plurality of different formats that include at
least two of: formatted data, unformatted data and data links" (myriad of sources,
column 18, lines 8-20; any text source can be used as input, column 18, lines 12-15)
and "that is in a plurality of different formats" (any text source can be used as input,
column 18, lines 12-15).

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to combine Liu and Keith because using the steps of "raw",
"operative to link a raw data item that is in a plurality of different formats that include at
least two of: formatted data, unformatted data and data links" and "that is in a plurality of
different formats" would have given those skilled in the art the tools to improve the
invention by allowing the indexing and searching of data sources which are not in a

database format. This gives the user the advantage of the ability to quickly utilize these data sources which are too large in number to search otherwise.

As per claim 6, Liu teaches

the knowledge container creator module is operative to generate the first data descriptor item based upon the data item (code generator produces XML template, page 3-4, section 2.1, "Code Generation" paragraph).

Liu does not explicitly indicate "raw".

However, Keith discloses "raw" (raw data processing, column 25, lines 53-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Liu and Keith because using the steps of "raw" would have given those skilled in the art the tools to improve the invention by allowing the indexing and searching of data sources which are not in a database format. This gives the user the advantage of the ability to quickly utilize these data sources which are too large in number to search otherwise.

As per claim 7, Liu teaches

a base knowledge container update module that is operative to generate the second data descriptor item based upon the data item (generate wrapper, page 3-4, section 2.1, "Testing and Packing" paragraph).

Liu does not explicitly indicate "raw".

However, Keith discloses "raw" (raw data processing, column 25, lines 53-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine <u>Liu</u> and <u>Keith</u> because using the steps of "raw" would have given those skilled in the art the tools to improve the invention by allowing the indexing and searching of data sources which are not in a database format. This gives the user the advantage of the ability to quickly utilize these data sources which are too large in number to search otherwise.

As per claim 8, <u>Liu</u> teaches

a base knowledge container update module that is operative to format the first and second data descriptor items in XML knowledge container format. (XML templates, page 3, section 2.1, "Code Generation" paragraph)

As per claim 9, <u>Liu</u> teaches

a knowledge container administrator module operative to modify a template descriptor item (update, pages 3-4, section 2.1, "Testing and Packing" paragraph), for creating the first data descriptor item and for searching the first and second data descriptor items, wherein the template descriptor item includes at least one of: template knowledge containers (XML templates, pages 3-4, section 2.1, "Testing and Packing" paragraph), for providing the inputs for entering the context descriptor, search template knowledge containers, for providing the inputs for searching the data descriptor items (testing structure and steps, assigning information to wrapper, pages 3-4, section 2.1, "Testing and Packing" paragraph).

Liu does not explicitly indicate "raw" and "and dictionary knowledge containers,

for identifying keywords".

However, Keith discloses "raw" (raw data processing, column 25, lines 53-54)

and "and dictionary knowledge containers, for identifying keywords" (column 25, lines

44-47).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine Liu and Keith because using the steps of "raw" would

have given those skilled in the art the tools to improve the invention by allowing the

indexing and searching of data sources which are not in a database format. This gives

the user the advantage of the ability to quickly utilize these data sources which are too

large in number to search otherwise.

As per claim 10, Liu teaches

modifying template descriptor item includes at least one of: adding fields,

removing fields, adding keywords and removing keywords (updates to rules, pages 3-4,

section 2.1, "Testing and Packing" paragraph).

As per claim 11, Liu teaches

a knowledge container administrator module operative to create knowledge

transformation information by extrapolating data from the data item and operative to link

the data item to the knowledge transformation information (XWRAP creates parse tree

where leafs act as links, page 12, section 4.2, "Example 3").

Liu does not explicitly indicate "raw".

However, Keith discloses "raw" (raw data processing, column 25, lines 53-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Liu and Keith because using the steps of "raw" would have given those skilled in the art the tools to improve the invention by allowing the indexing and searching of data sources which are not in a database format. This gives the user the advantage of the ability to quickly utilize these data sources which are too large in number to search otherwise.

As per claim 12, Liu teaches

the knowledge container administrator module is operative to create a knowledge model using knowledge discovery techniques on the data item in the form of at least one of: decision trees, rule sets, neural networks and expression trees (page 3, section 2.1, "Code Generation" paragraph).

Liu does not explicitly indicate "raw".

However, Keith discloses "raw" (raw data processing, column 25, lines 53-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Liu and Keith because using the steps of "raw" would have given those skilled in the art the tools to improve the invention by allowing the indexing and searching of data sources which are not in a database format. This gives the user the advantage of the ability to quickly utilize these data sources which are too large in number to search otherwise.

As per claim 14, <u>Liu</u> teaches

the base knowledge container update module (page 3-4, section 2.1, "Testing

and Packing" paragraph).

<u>Liu</u> does not explicitly indicate "generates a keyword descriptor by processing the

raw data item".

However, <u>Keith</u> discloses "generates a keyword descriptor by processing the raw

data item" (column 25, lines 53-58).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine <u>Liu</u> and <u>Keith</u> because using the steps of "generates a

keyword descriptor by processing the raw data item" would have given those skilled in

the art the tools to improve the invention by allowing the indexing and searching of data

sources which are not in a database format. This gives the user the advantage of the

ability to quickly utilize these data sources which are too large in number to search

otherwise.

As per claim 15, <u>Liu</u> teaches

a knowledge container database operative to store the data item, the first data

descriptor item, and the second data descriptor item (XML templates and resulting XML

file, page 14, section 4.3, fourth full paragraph).

<u>Liu</u> does not explicitly indicate "raw".

However, <u>Keith</u> discloses "raw" (raw data processing, column 25, lines 53-54).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine Liu and Keith because using the steps of "raw" would have given

those skilled in the art the tools to improve the invention by allowing the indexing and

searching of data sources which are not in a database format. This gives the user the

advantage of the ability to quickly utilize these data sources which are too large in

number to search otherwise.

     As per claim 16, Liu teaches

     the base knowledge container comprises: a knowledge source depository

containing the data item (source document, page 5, section 2.2, third paragraph);

     and a metaknowledge depository containing the at least two data descriptor

items associated with the data item (rules, pages 3-4, section 2.1, "Code Generation"

paragraph; rulebase, figure 1).

     Liu does not explicitly indicate "raw".

     However, Keith discloses "raw" (raw data processing, column 25, lines 53-54).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine Liu and Keith because using the steps of "raw" would have given

those skilled in the art the tools to improve the invention by allowing the indexing and

searching of data sources which are not in a database format. This gives the user the

advantage of the ability to quickly utilize these data sources which are too large in

number to search otherwise.

As per claim 17, Liu teaches

the base knowledge container further comprises a knowledge representation depository containing the knowledge transformation information generated from the data item (resulting XML file, page 14, section 4.3, fourth full paragraph; figure 10).

Liu does not explicitly indicate "raw".

However, Keith discloses "raw" (raw data processing, column 25, lines 53-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Liu and Keith because using the steps of "raw" would have given those skilled in the art the tools to improve the invention by allowing the indexing and searching of data sources which are not in a database format. This gives the user the advantage of the ability to quickly utilize these data sources which are too large in number to search otherwise.

As per claim 18, Liu teaches

the knowledge transformation information is in the form of at least one of: knowledge model and summary report (resulting XML file contains information about the processed data file, page 14, section 4.3, fourth full paragraph; figure 10).

As per claim 19, Liu teaches

the knowledge model is in the form of at least one of: decision trees, rule sets, neural networks and expression trees (rules, section 2.1, pages 3-4, "Code Generation" paragraph).

As per claim 20, <u>Liu</u> teaches

the first and second data descriptor items are in the form of at least one of the

following: decision-support data descriptor, keyword descriptor, context descriptor and

data access instructions descriptor (semantic knowledge in the form of rules, section

2.1, pages 3-4, "Code Generation" paragraph).

As per claim 21, <u>Liu</u> teaches

the data item, the first descriptor item and the second descriptor item are stored

in a XLM data blocks. (XML templates which contain blocks, page 14, section 4.3, fourth

full paragraph; figure 10)

<u>Liu</u> does not explicitly indicate "raw".

However, <u>Keith</u> discloses "raw" (raw data processing, column 25, lines 53-54).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine <u>Liu</u> and <u>Keith</u> because using the steps of "raw" would have given

those skilled in the art the tools to improve the invention by allowing the indexing and

searching of data sources which are not in a database format. This gives the user the

advantage of the ability to quickly utilize these data sources which are too large in

number to search otherwise.

As per claim 22, <u>Keith</u> teaches

the XML data blocks (parseable XML, page 2, section 1, fourth paragraph)

Liu does not explicitly indicate "are defined by a data block definition with a form

including at least one of: a table and a matrix".

However, Keith discloses "are defined by a data block definition with a form

including at least one of: a table and a matrix" (column 25, lines 55-56).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine Liu and Keith because using the steps of "are defined

by a data block definition with a form including at least one of: a table and a matrix"

would have given those skilled in the art the tools to improve the invention by allowing

the indexing and searching of data sources which are not in a database format. This

gives the user the advantage of the ability to quickly utilize these data sources which

are too large in number to search otherwise.

As per claim 25, Keith teaches

A computer readable medium containing programming instructions for

processing data, the computer readable medium including programming instructions for:

(see abstract, where XWRAP inherently needs to work on a system for managing data)

linking a data item, capable of containing data representing data stored (XWRAP

creates parse tree where leafs act as links, page 12, section 4.2, "Example 3"), to at

least a first data descriptor item wherein the first data descriptor item is in the form of a

context descriptor, containing descriptive information about the data item (XML

templates contain field for specified source document fields, page 15, section 4.3, fourth

paragraph), linking the data item to at least a second data descriptor item (XWRAP

creates parse tree where leafs act as links, page 12, section 4.2, "Example 3"), wherein

the second data descriptor item is in the form of at least a data access instructions

descriptor, providing instructions on how to access the data in the data item (XML

templates containing processing instructions, page 15, section 4.3, fourth paragraph);

locating the data item by searching at least one of: the first and second data

descriptor items (XML templates contain field for specified source document fields, page

15, section 4.3, fourth paragraph);

generating knowledge transformation information by extrapolating data from the

data item (XML templates containing processing instructions, page 15, section 4.3,

fourth paragraph);

and creating the first and second data descriptor items based upon the data item

(XML templates containing field identifiers and instructions for processing source, page

14, section 4.3, fourth paragraph).

Liu does not explicitly indicate "raw" and "that is in a plurality of different formats

that include at least two of: formatted data, unformatted data and data links".

However, Keith discloses "raw" (raw data processing, column 25, lines 53-54),

and "that is in a plurality of different formats that include at least two of: formatted data,

unformatted data and data links" (any text source can be used as input, column 18,

lines 12-15).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine Liu and Keith because using the steps of "raw" and

"that is in a plurality of different formats that include at least two of: formatted data,

unformatted data and data links" would have given those skilled in the art the tools to improve the invention by allowing the indexing and searching of data sources which are not in a database format. This gives the user the advantage of the ability to quickly utilize these data sources which are too large in number to search otherwise.

As per claim 27, Liu teaches

A data management system comprising: (see abstract, where XWRAP inherently needs to work on a system for managing data)

a processing device; (users use mouse to select means there is a processing device, abstract, second paragraph)

and memory containing executable instructions that cause the processing device to perform as a knowledge container creator module operative to create at least a first data descriptor item and at least a second data descriptor item based upon the data item (XML templates containing field identifiers and instructions for processing source, page 14, section 4.3, fourth paragraph), capable of containing data, and to link a data item to at the least a first data descriptor item, and the knowledge container creator module operative to link the data item to the at least a second data descriptor item (XWRAP creates parse tree where leafs act as links, page 12, section 4.2, "Example 3"), wherein the second data descriptor item is in the form of at least a decision-support data descriptor, containing a decision-support information generated from the data; (generate wrapper, page 3-4, section 2.1, "Testing and Packing" paragraph)

and a data access instructions descriptor, providing instructions on how to

access the data in the data item; (XML templates containing processing instructions,

page 15, section 4.3, fourth paragraph)

and a knowledge container searcher module operative to retrieve the data item

by searching at least one of: the first and second data descriptor items; (XML output

which can be parsed, page 2, section 1, fourth paragraph)

a knowledge container administrator module operative to modify template

descriptor item for creating the first data descriptor item and for searching the first and

second data descriptor items, wherein the template descriptor item includes at least one

of: (updates to rules, pages 3-4, section 2.1, "Testing and Packing" paragraph)

template knowledge containers, for providing the inputs for entering the context

descriptor, (testing structure and steps, assigning information to wrapper, pages 3-4,

section 2.1, "Testing and Packing" paragraph)

search template knowledge containers, for providing the inputs for searching the

data descriptor items, (XML output which can be parsed, page 2, section 1, fourth

paragraph)

and the knowledge container administrator module operative to create

knowledge transformation information by extrapolating data from the data item and

operative to link the data item to the knowledge transformation information; (updates to

rules, pages 3-4, section 2.1, "Testing and Packing" paragraph; creates parse tree

where leafs act as links, page 12, section 4.2, "Example 3")

and a base knowledge container update module operative to format the data item

into an XML knowledge container format; (XML templates and resulting XML file, page

14, section 4.3, fourth full paragraph)

a knowledge container database operative to store the data item, the first

descriptor item and the second descriptor item and the knowledge container database

further having: a knowledge source depository containing the data item; (XML templates

and resulting XML file, page 14, section 4.3, fourth full paragraph; rulebase and source-

specific wrapper, figure 1)

a metaknowledge depository containing the data descriptor item associated with

the data item; (XWRAP rulebase and source-specific wrapper, figure 1)

and a knowledge representation depository containing the knowledge

transformation information generated from the data item.

Liu does not explicitly indicate "raw", "representing raw data that is in a plurality

of different formats that include at least two of: formatted data, unformatted data and

data links", "a keyword descriptor, identifying keywords contained in the raw data item",

"and to generate a keyword descriptor by processing the raw data item", "dictionary

knowledge containers, for identifying keywords" and "that is in a plurality of different

formats".

However, Keith discloses "raw" (raw data processing, column 25, lines 53-54),

"representing raw data that is in a plurality of different formats that include at least two

of: formatted data, unformatted data and data links" (myriad of sources, column 18,

lines 8-20; any text source can be used as input, column 18, lines 12-15), "a keyword

descriptor, identifying keywords contained in the raw data item" (concept terms, column 25, lines 22-25), "and to generate a keyword descriptor by processing the raw data item" (terms in matrix, column 25, lines 55-57), "dictionary knowledge containers, for identifying keywords" (column 25, lines 44-47) and "that is in a plurality of different formats" (any text source can be used as input, column 18, lines 12-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Liu and Keith because using the steps of "raw", "representing raw data that is in a plurality of different formats that include at least two of: formatted data, unformatted data and data links", "a keyword descriptor, identifying keywords contained in the raw data item", "and to generate a keyword descriptor by processing the raw data item", "dictionary knowledge containers, for identifying keywords" and "that is in a plurality of different formats" would have given those skilled in the art the tools to improve the invention by allowing the indexing and searching of data sources which are not in a database format. This gives the user the advantage of the ability to quickly utilize these data sources which are too large in number to search otherwise.

As per claim 28, Liu teaches

A data management system comprising: (see abstract, where XWRAP inherently needs to work on a system for managing data)

a processing device; (users use mouse to select means there is a processing device, abstract, second paragraph)

memory containing executable instructions that cause the processing device to

perform as a knowledge container creator module operative to create at least a first

data descriptor item and at least a second data descriptor item based upon a data item

(XML templates containing field identifiers and instructions for processing source, page

14, section 4.3, fourth paragraph), capable of containing data, and to link the data item

to at the least a first data descriptor item, to link the data item to the at least a second

data descriptor item (XWRAP creates parse tree where leafs act as links, page 12,

section 4.2, "Example 3"), wherein the first data descriptor item is in the for of a context

descriptor (XML templates containing field identifiers and instructions for processing

source, page 14, section 4.3, fourth paragraph), and wherein the second data descriptor

item is in the form of at least a data access instructions descriptor (XML templates

containing processing instructions, page 15, section 4.3, fourth paragraph), and the

executable instructions cause the processor to generate a plurality of knowledge

models for the data item by analyzing information in the data items wherein the plurality

of different knowledge models are in different formats (XML template file, page 14,

section 4.3, third paragraph, where the testing and packing allows for different

formatting of rule sets which are knowledge models for the source data, pages 3-4,

section 2.1, "Testing and Packing" paragraph).

Liu does not explicitly indicate "raw", "representing raw data that is in one of a

plurality of different formats that include at least two of: formatted data, unformatted

data and data links" and "that is in a plurality of different formats".

However, Keith discloses "raw" (raw data processing, column 25, lines 53-54), "representing raw data that is in one of a plurality of different formats that include at least two of: formatted data, unformatted data and data links" (myriad of sources, column 18, lines 8-20; any text source can be used as input, column 18, lines 12-15) and "that is in a plurality of different formats" (any text source can be used as input, column 18, lines 12-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Liu and Keith because using the steps of "raw", "representing raw data that is in one of a plurality of difference formats that include at least two of: formatted data, unformatted data and data links" and "that is in a plurality of different formats" would have given those skilled in the art the tools to improve the invention by allowing the indexing and searching of data sources which are not in a database format. This gives the user the advantage of the ability to quickly utilize these data sources which are too large in number to search otherwise.

As per claim 29, Lui teaches

A data management system comprising: (see abstract, where XWRAP inherently needs to work on a system for managing data)

a processing device; (users use mouse to select means there is a processing device, abstract, second paragraph)

memory containing executable instructions that cause the processing device to perform as a knowledge container creator module operative to create at least a first

data descriptor item and at least a second data descriptor item based upon a data item,

and to link the data item that is in a plurality of different formats to at least a first data

descriptor item, to link the raw data item to the at least a second data descriptor item

(XWRAP creates parse tree where leafs act as links, page 12, section 4.2, "Example

3");

wherein the first data descriptor item is in the form of a context descriptor (XML

templates containing field identifiers and instructions for processing source, page 14,

section 4.3, fourth paragraph), and wherein the second data descriptor item is in the

form of at least a data access instructions descriptor that provides instructions on how

to access the new data in the data file (XML templates containing processing

instructions, page 15, section 4.3, fourth paragraph);

and the knowledge container creator module is operative to create the first data

descriptor item in the form of a context descriptor that includes data indicating the

purpose of a test and how the test of a product was performed and how the test was

performed (semantic knowledge in the form of rules, section 2.1, pages 3-4, "Code

Generation" paragraph).

Liu does not explicitly indicate "raw", "representing raw data that is in one of a

plurality of different formats" and "that is in a plurality of different formats".

However, Keith discloses "raw" (raw data processing, column 25, lines 53-54),

"representing raw data that is in one of a plurality of different formats" (myriad of

sources, column 18, lines 8-20; any text source can be used as input, column 18, lines

12-15) and "that is in a plurality of different formats" (any text source can be used as input, column 18, lines 12-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine <u>Liu</u> and <u>Keith</u> because using the steps of "raw", "representing raw data that is in one of a plurality of difference formats" and "that is in a plurality of different formats" would have given those skilled in the art the tools to improve the invention by allowing the indexing and searching of data sources which are not in a database format. This gives the user the advantage of the ability to quickly utilize these data sources which are too large in number to search otherwise.

As per claim 30,

<u>Liu</u> does not explicitly indicate "raw".

However, <u>Keith</u> discloses "raw" (raw data processing, column 25, lines 53-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine <u>Liu</u> and <u>Keith</u> because using the steps of "raw" would have given those skilled in the art the tools to improve the invention by allowing the indexing and searching of data sources which are not in a database format. This gives the user the advantage of the ability to quickly utilize these data sources which are too large in number to search otherwise.

Neither <u>Liu</u> nor <u>Keith</u> not expressly show "the data item comprises non-text information".

However these differences are only found in the nonfunctional descriptive

material and are not functionally involved in the steps recited. Thus, this descriptive

material will not distinguish the claimed invention from the prior art in terms of

patentability, see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir.

1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to process raw data of any type because such data

does not functionally relate to the steps in the system claimed and because the

subjective interpretation of the data does not patentably distinguish the claimed

invention.

Response to Arguments

4.   Applicant's arguments filed 6/30/2010 regarding claims 1, 5-12, 14-22, 25, and

27-23 have been fully considered but they are not persuasive.

5.   With respect to claims 1, 5, 25, 27 and 28, Applicant argues that neither <u>Liu</u> nor

<u>Keith</u> disclose "wherein the raw data item is itself in a plurality of different formats,

including at least two of: formatted data, unformatted data, and data links". Applicant

further argues that each data item in Keith is only in a single format, surmising that

"although different databases and different text sources may be accessed, the raw data

such as the business section of the *New York Times* is all in a single format" (Applicant

Arguments/Remarks Made in Amendment, filed 6/30/2010, page 12). Respectfully, it is

noted that <u>Keith</u> discloses:

> "A myriad of other data sources, such as personnel databases, medical and law
> databases, specialized databases of all types whether structured or unstructured,
> can be rather easily tapped for input into the methods of the current invention.
> Any text source, such as news publications, works of literature, and periodicals,
> can be used for input to the current invention. Thus, preferred embodiments of
> the invention are applicable to data sets obtained by querying databases (e.g.,
> relational and object), flat files and text." (<u>Keith</u>, column 18, lines 8-16)

In this citation <u>Keith</u> describes an interest in capturing data from both structured

and unstructured databases as well as any text source. While the Applicant contends

that this teaching describes only a single format, it is respectfully submitted that one of

ordinary skill in the art would interpret such a broad teaching in <u>Keith</u> as not being

limited to a single format. Given that the claimed invention gives us no definition of what

"formatted" and "unformatted" data means, it could be broadly and reasonably

interpreted as the formatting commonly found in a *New York Times* such as bolded

headings, or the unformatted text found in simple text files, and Keith clearly discloses

both of these sources as "[a]ny text source" (<u>Keith</u>, column 18, line 12). In addition, the

claimed "data links" format could be considered citation links commonly found in

"literature, and periodicals" (<u>Keith</u>, column 18, line 13) that reference other works, and

since in online data sources these types of documents often contain hyperlinks that are

links to these other data sources, can be considered the claimed data links. Therefore,

respectfully, the <u>Keith</u> reference discloses the limitation.

In addition, the formatting or lack of formatting of the data recited is not functionally involved in the steps recited and thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to process raw data of any type because such data does not functionally relate to the steps in the system claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention. Therefore it is suggested that the Applicant consider defining how this information is made functional in order to further define the claim and overcome the art of record.

6.   Regarding claim 29, Applicant argues that the cited references do not teach the claimed "the purpose of the test" or "how the test was performed" in a descriptor item. Examining the instant specification, paragraph [0052] describes the these elements of the descriptor as follows:

> "The context descriptor 412 contains information such as who, what, where, why and how-type information related to the data item 110. For example, such information can include who entered the test data, at what location, what the subject of the test was, what the purpose of the test was and how the test was performed. Here, such who, what, where, why and how-type information is stored in fields in a base knowledge container record. Further, such field information may be displayed to a user via a GUI on a display 106 and the user can modify the same field information through the same GUI." (paragraph [0053] of instant specification)

Since the information is simply text fields, any data can represent this non-functional data and the cited portions of the <u>Lui</u> reference (section 2.1, pages 3-4, "Code Generation" paragraph) encode rule information which can read on the claimed non-functional text fields. In fact, the limitations of text fields are non-functional descriptive material and this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994). Therefore it is suggested that the Applicant consider defining how this information is made functional in order to further define the claim and overcome the art of record.

7.   Regarding claim 30, Applicant argues that the cited references do not teach the claimed limitation "that the raw data item consists of non-text information". It is respectfully submitted, as shown in the claim rejection above, that the non-text information is not functionally involved in the steps recited and therefore this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994). Therefore it is suggested that the Applicant consider defining how this information is made functional in order to further define the claim and overcome the art of record.

Conclusion

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jay A. Morrison whose telephone number is (571) 272-

7112. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/Jay A Morrison/
Examiner, Art Unit 2168

Jay Morrison
TC2100